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I. General Remarks Concerning This Response

Claims 1-21 are currently pending in the present application. No claims have been amended, added, or canceled. Reconsideration of the claims is requested.

5 The Office action has not acknowledged the receipt of formal drawings, which were filed on 10/16/2000. Applicant kindly requests an acknowledgment of the filing of the formal drawings and an indication of whether or not the formal drawings are acceptable.

II. Summary of Present Invention

10 The present invention updates operational parameters of a monitoring agent on a client in a distributed data processing system. The monitoring agent monitors characteristics of at
15 least one application executing on a server in the distributed data processing system. The monitoring agent filters the outgoing network data traffic from the client to the server. The monitoring agent then determines whether an outgoing transaction in the network data is addressed such that an application on the
20 server receives the outgoing transaction as a request to change the operational parameters of the monitoring agent. In order to determine whether the outgoing transaction is a request to change the operational parameters of the monitoring agent, the outgoing transaction is parsed for a destination address and matched with
25 a destination address stored as an operational parameter of the monitoring agent on the client. The destination address may be a Uniform Resource Locator (URL) embedded within a Hypertext Transport Protocol (HTTP) request. In response to a positive determination, the monitoring agent then sends a request to the
30 server to send to the monitoring agent an update of the operational parameters of the monitoring agent. The monitoring agent receives and stores the update of the operational parameters of the monitoring agent.

III. 35 U.S.C. § 103(a)-Obviousness-Pandya in view of Lin

The Office action has rejected independent claims 1, 2, 5-9, 12-16, and 19-21 under 35 U.S.C. § 103(a) as unpatentable over Pandya et al., "Software, systems, and methods for managing a distributed network", U.S. Patent No. 6,671,724 B1, filed 03/21/2000, issued 12/30/2003, in view of Lin et al., "Network management system based on passive monitoring and proactive management for formulation behavior state transition models", U.S. Patent Number 6,405,250 B1, filed 01/25/1999, issued 06/11/2002. This rejection is traversed.

All of the pending independent claims have been rejected, at least in part, over a combination of the disclosure of Pandya et al. and Lin et al.; each of the independent claims has one or more common elements against which the rejection applies certain portions of Pandya et al. and Lin et al.. However, Applicant asserts that there is at least one element of each independent claim that is not shown in Pandya et al. and Lin et al. nor provided by a combination of Pandya et al. and Lin et al., thereby causing these obviousness rejections to be deficient.

The majority of the Office action is devoted to the rejection of independent claim 1, which addresses the first two elements of claim 1 by referencing Pandya et al. and then addresses the third element of claim 1 by referencing Lin et al.. Independent claim 1 reads as follows:

1. A method for updating operational parameters of a monitoring agent on a client in a distributed data processing system, the monitoring agent monitoring characteristics of at least one application executing on a server in the distributed data processing system, the method comprising the steps of:
 - filtering, by the monitoring agent, network data from the client to the server;
 - determining, by the monitoring agent, whether an outgoing transaction in the network data is addressed such that an application on the server receives the outgoing transaction as a request to change the operational parameters of the monitoring agent; and

in response to a positive determination that the outgoing transaction is addressed such that an application on the server receives the outgoing transaction as a request to change the operational parameters of the monitoring agent, sending a request from the monitoring agent to the server to send to the monitoring agent an update of the operational parameters of the monitoring agent.

The first part of the rejection of claim 1 states:

filtering, by the monitoring agent, network data from the client to the server [col 10, lines 12-52];
determining, by the monitoring agent, whether an outgoing transaction in the network data is addressed such that an application on the server receives the outgoing transaction as a request to change the operational parameters of the monitoring agent [col 8, lines 46-64; col 11, lines 24-35].

The first portion of Pandya et al. that is cited by the rejection reads as follows:

As seen in FIG. 6, agent 70 is interposed between application program 122 and a communications protocol layer for providing end-to-end data transmission, such as transport layer 124 of communications protocol stack 92. Typically, the agent modules of the present invention are used with network devices that employ layered communications software adhering to either the OSI or TCP/IP-based protocol models. Thus, agent 70 is depicted as "interposed," i.e. in a data path, between an application program and a transport protocol layer. However, it will be appreciated by those skilled in the art that the invented agent may be used with protocol software not adhering to either the OSI or TCP/IP models, but that nonetheless includes a protocol layer providing transport functionality, i.e. providing for end-to-end data transmission.

Because of the depicted position within the data path, agent 70 is able to monitor network traffic and obtain information that is not available by hooking into transport layer 124 or the layers below the transport layer. At the higher layers, the available data is richer and more detailed. Hooking into the stack at higher layers allows the network to become more "application-aware" than is possible when monitoring occurs at the transport and lower layers.

The agent modules may be interposed at a variety of points between application program 122 and transport layer 124. Specifically, as shown in FIGS. 7 and 8, agent 70 may be associated with a client computer so that it is adjacent an application programming interface (API) adapted to

provide a standardized interface for application program 122 to access a local operating system (not shown) and communications stack 92. In FIG. 7, agent 70 is adjacent a winsock API 128 and interposed between application program 122 and the winsock interface. FIG. 8 shows an alternate configuration, in which agent 70 is again adjacent the winsock interface, but the winsock interface is interposed between application program 122 and agent 70. With either configuration, the agent is interposed between the transport layer 124 of communications stack 92 and is adapted to directly monitor data received by or sent from the winsock interface.--(column 10, lines 12-52).

Hence, the fact that Pandya et al. discloses a monitoring agent (agent module) that filters network traffic is not disputed.

However, the second and third portions of Pandya et al. that are cited by the rejection read as follows (emphasis added):

For example, continuous media applications such as IP telephony have certain bandwidth requirements for optimum performance, and are particularly sensitive to network jitter and delay. **Policies could be written to specify a desired level of service, including bandwidth requirements and threshold levels for jitter and delay, for client computers attempting to run IP telephony applications. The policies would further direct the agents and control modules to attempt to provide the specified level of service.** Security checking could also be included to ensure that the particular user or client computer was permitted to run the application. In the event that the specified service level could not be provided, the requesting user could be provided with a message indicating that the resources for the request were not available. The user could also be offered various options, including proceeding with a sub-optimal level of service, placing a conventional telephone call, waiting to perform the task until a later time, etc.--(c. 8, l. 46-64).

To provide the specified network service level, traffic control module 132 may maintain a queue or plurality of queues. When data is sent from the client to the network, or from the network to the client, redirector module 130 intercepts the data, and **traffic module 132 places the individual units of data in the appropriate queue.** The control points may be configured to periodically provide traffic control commands, which may include the QoS parameters and service specifications discussed above. In response, **traffic control module 132 controls the passing of data into, through or out of the queues in order to provide the specified service level.**--(c. 11, lines 24-35).

It should be apparent that Pandya et al. does not disclose the second element of claim 1, i.e. "determining, by the monitoring agent, whether an outgoing transaction in the network data is addressed such that an application on the server receives the outgoing transaction as a request to change the operational parameters of the monitoring agent". At most, Pandya et al. mentions in the second copied portion that "policies would further direct the agents and control modules to attempt to provide the specified level of service"; it may be fairly assumed from this statement that parameters are sent to the agent modules in accordance with the policies. However, the act of sending parameters to the agent modules is not equivalent or analogous to the feature in the present application in which the monitoring agent scans the network traffic for a particular type of transaction that is being sent to a server in order to request that the server subsequently change the operational parameters of the monitoring agent. The third copied portion of Pandya et al. states that a traffic control module "controls the passing of data into, through or out of the queues". Again, this feature is not equivalent or analogous to the claimed feature in the present application against which it was applied, i.e. the second element of claim 1. Hence, Pandya et al. does not have any features that are even remotely analogous to the second element of claim 1.

The second part of the rejection of claim 1 specifically states that Pandya et al. does not disclose the third element of claim 1 and then states on page 3, first full paragraph, that Lin et al. discloses the third element; the rejection reads:

in response to a positive determination that the outgoing transaction is addressed such that an application on the server receives the outgoing transaction as a request to change the operational parameters of the monitoring agent, sending a request from the monitoring agent to the server to send to the monitoring agent an update of the operational parameters of the monitoring agent [col 7, lines 37-50; and col 8, lines 29-38].

The portions of Lin et al. that are cited against the third element by the rejection read as follows (emphasis added):

5 In addition to a database 451 which stores the behavior transition model for the NE associated with MA 450, MA 450 also includes a report filter 452 and an action enforcer 453. Report filter 452 receives raw MIB data, such as counter values and alarms from the associated network element and **uses the behavior model in database 451 to**
10 **filter out unnecessary reporting details. MIB values that are potentially of interest to NMS 120 based on the current status of the NE associated with MA 450 are then aggregated and forwarded to NMS 120 through communicator 454.** On the other hand, action enforcer 453 receives action requests
15 **from NMS 120 via communicator 454 and processes them.** The nature of the requests includes reconfiguring the network element, acquiring specific MIB values, or updating report filtering policies.--(column 7, lines 37-50).

20 Report filter 452 also receives NE generated alarms. For each alarm received, report filter 452 first saves the alarm information in a log file at step 531, then consults its current reporting policies in database 451 to decide if NMS 120 is interested in the alarm at step 532. **Depending on the outcome of the decision box step 532, report filter**
25 **452 either forwards the alarm information to communicator 454 at step 533, or proceeds back to the beginning of the event loop at step 502.** Report filter 452 also loops back to step 502 at the end of steps 513, 523, and 533.--(column 8, lines 29-38).

30 It is not clear what features of the system that is disclosed in Lin et al. is meant to be applied against the claimed feature of the present invention because the rejection merely references multiple portions of text in Lin et al. without discussing the
35 disclosed features. At most, Lin et al. discloses filtering of data, accumulation of certain data for forwarding to another entity, and receiving requests to perform certain actions. However, it should be apparent that Lin et al. does not disclose the third element of claim 1, notwithstanding the argument in the
40 rejection to the contrary; again, the third element of independent claim 1 reads:

in response to a positive determination that the outgoing transaction is addressed such that an application on the server receives the outgoing transaction as a request to change the operational parameters of the monitoring agent, sending a request from the monitoring agent to the server to send to the monitoring agent an update of the operational parameters of the monitoring agent.

Hence, Lin et al. does not have any features that are even remotely analogous to the third element of claim 1.

The motivational statement in the rejection is completely generic with respect to network traffic monitoring tools. The rejection states: "It would have been obvious to a person skilled in the art at the time the invention was made to combine the teaching of Pandya and Lin because Lin's teaching of monitoring agent sending request [sic] would allow reduce network traffic [sic] to prevent congestion in a communication network". As should be apparent, the motivational statement does not link any particular characteristic from the teachings of Lin et al. into the teachings of Pandya et al.; there is no argument as to why someone would particularly look to the teachings of Lin et al. for something lacking in the teachings of Pandya et al., and there is no argument as to how an element from the system of Lin et al. could be integrated into the system of Pandya et al..

Applicant admits that both Pandya et al. and Lin et al. disclose distributed monitoring agents. However, these types of systems were admitted as prior art and were distinguished in the present application. Moreover, neither Pandya et al. nor Lin et al. disclose the operation of sending a request from a monitoring agent to a server for operational parameters for the monitoring agent, which is specifically recited in method claim 1 as happening when the agent detects an outgoing transaction to the server to change its operational parameters, or more generally in method claim 6, when the agent detects an outgoing transaction to the server. The present invention is directed to a specific process for the exchange of configuration information between a

management server and the distributed monitoring agents; this exchange is triggered by a certain class of events that are detected by a monitoring agent, which is not shown in either Pandya et al. nor Lin et al. nor in a hypothetical combination of the disclosure of these references.

Independent claims 6, 8, 13, 15, and 20 are similar to independent claim 1; these other independent claims were addressed by the Office action as merely being similar to independent claim 1. Hence, Applicant asserts that the references are deficient with respect to independent claims 6, 8, 13, 15, and 20 and their dependent claims for the same reasons that were argued above with respect to independent claim 1.

The dependent claims recites further limitations, e.g., that a monitoring agent may monitor network traffic for particular IP addresses; these features are also not disclosed in the applied prior art references as claimed within the present application. Since the dependent claims incorporate the features of the independent claims, the rejections are similar deficient with respect to the dependent claims for the same reasons that were argued above with respect to the independent claims.

Examiner bears the burden of establishing a *prima facie* case of obviousness

The examiner bears the burden of establishing a *prima facie* case of obviousness based on the prior art when rejecting claims under 35 U.S.C. § 103. *In re Fritch*, 972 F.2d 1260, 23 U.S.P.Q.2d 1780 (Fed. Cir. 1992). Only when a *prima facie* case of obviousness is established does the burden shift to the applicant to produce evidence of nonobviousness. *In re Oetiker*, 977 F.2d 1443, 1445, 24 U.S.P.Q.2d 1443, 1444 (Fed. Cir. 1992); *In re Rijckaert*, 9 F.3d 1531, 1532, 28 U.S.P.Q.2d 1955, 1956 (Fed. Cir. 1993). If the Patent Office does not produce a *prima facie* case of unpatentability, then without more the applicant is entitled

to grant of a patent. *In re Oetiker*, 977 F.2d 1443, 1445, 24 U.S.P.Q.2d 1443, 1444 (Fed. Cir. 1992); *In re Grabiak*, 769 F.2d 729, 733, 226 U.S.P.Q. 870, 873 (Fed. Cir. 1985). In response to an assertion of obviousness by the Patent Office, the applicant
5 may attack the Patent Office's *prima facie* determination as improperly made out, present objective evidence tending to support a conclusion of nonobviousness, or both. *In re Fritch*, 972 F.2d 1260, 1265, 23 U.S.P.Q.2d 1780, 1783 (Fed. Cir. 1992).

Pandya et al. clearly fails to show a feature of the present
10 invention as currently claimed and as asserted by the Office action, thereby rendering Pandya et al. incapable of being used as a primary reference as argued by the current rejection. In addition, Lin et al. clearly fails to show a feature of the present invention as currently claimed and as asserted by the
15 Office action, thereby rendering Lin et al. incapable of being used as a secondary reference as argued by the current rejection. Moreover, the combination of Lin et al. and Lin et al. fail to show the claimed features. As should be recognized, because both the primary and secondary references in the rejection fail to
20 disclose the claimed features against which the references were applied, and because the references fail to be combinable to produce this feature, the rejection fails to fulfill the requirements of a proper obviousness argument.

With respect to independent claims 1, 6, 8, 13, 15, and 20,
25 Applicant respectfully submits that the applied references cannot be combined nor modified to produce the claimed invention. Hence, a rejection of the independent claims cannot be based upon the cited prior art to establish a *prima facie* case of obviousness. Therefore, a rejection of the independent claims
30 under 35 U.S.C. § 103(a) has been shown to be insupportable in view of the cited prior art, and the independent claims are patentable over the applied references. Applicant respectfully requests the withdrawal of the rejection of the independent

claims. Applicant further argues that all of the pending claims, including the dependent claims which comprise the elements of their independent claims by inclusion, are distinguishable over Pandya et al. in view of Lin et al. for these reasons, and
5 Applicant kindly requests the withdrawal of all rejections.

IV. 35 U.S.C. § 103(a)-Obviousness-Pandya in view of Lin and further in view of Inakoshi

The Office action has rejected dependent claims 3, 4, 10,
10 11, 17, and 18 under 35 U.S.C. § 103(a) as unpatentable over Pandya et al. in view of Lin et al. and further in view of Inakoshi, "Network resource monitoring system and method for providing notice of changes in resources in a network", U.S. Patent Number 5,933,604, filed 11/05/1996, issued 08/03/1999.
15 This rejection is traversed.

Dependent claims 3 and 4 recite additional elements with respect to the outgoing transactions containing a URI (Uniform Resource Identifier) or a URL (Uniform Resource Locator) in an HTTP (HyperText Transport Protocol) request. It is not disputed
20 that Inakoshi discloses the use of URLs. However, Inakoshi does not disclose an element such as a determination that the outgoing transaction is addressed such that an application on the server receives the outgoing transaction as a request to change the operational parameters of the monitoring agent, as recited in the
25 second element of claim 1. Moreover, Inakoshi does not disclose a step of sending a request from the monitoring agent to the server to send to the monitoring agent an update of the operational parameters of the monitoring agent, as recited in the third element of claim 1. Thus, the combination of the teachings
30 of Inakoshi into the teachings of Pandya et al. and Lin et al. fails to reach the claimed invention, and the present invention is patentable over the applied prior art.

The Office action rejected dependent claims 10, 11, 17, and 18 as containing similar elements to dependent claims 3 and 4; claims 3 and 4 are method claims, whereas claims 10 and 11 are system claims, and claims 17 and 18 are computer program product claims. Thus, claims 10, 11, 17, and 18 are patentable for the same reasons as claims 3 and 4.

With respect to dependent claims 3, 4, 10, 11, 17, and 18, Applicant respectfully submits that the applied references cannot be combined nor modified to produce the claimed invention.

Hence, a rejection of these claims cannot be based upon the cited prior art to establish a *prima facie* case of obviousness.

Therefore, a rejection of these dependent claims under 35 U.S.C. § 103(a) has been shown to be insupportable in view of the cited prior art, and these dependent claims are patentable over the applied references. Applicant respectfully requests the withdrawal of the rejection of these dependent claims.

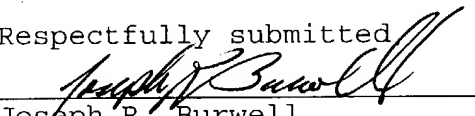
V. Conclusion

It is respectfully urged that the present patent application is patentable, and Applicant kindly requests a Notice of Allowance.

For any other outstanding matters or issues, the examiner is urged to call or fax the below-listed telephone numbers to expedite the prosecution and examination of this application.

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Respectfully submitted


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